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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,609	07/02/2007	Xavier Briand	20010.0008USWO	5232
52835 7590 08/26/2009 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER				
IQBAL, SYED TAHIA				
ART UNIT		PAPER NUMBER		
1793				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/594,609

**Applicant(s)**

BRIAND ET AL.

**Examiner**

SYED IQBAL

**Art Unit**

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date 09/08/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1-10, these claims recite the limitation "ulvan-derived oligosaccharides". One of ordinary skill in the art would not know how to interpret the metes and bounds of this limitation. A derivation of a chemical compound may be closely patterned after the subject chemical compound or may be loosely patterned after the subject chemical compound, such that it may bear no resemblance or form recognizable as the subject chemical compound which maybe chemically and/or biologically unrelated in function or form to the subject chemical compound.

Regarding claims 6-9, the recitation "effective amount" renders the claims indefinite as it is unclear how much of a substance would constitute an effective amount.

Regarding claims 6-8, the recitation "...it comprises..." renders the claims indefinite because it is unclear as to what subject matter the Applicant intends to direct the instant invention. Examiner is not certain as to what "it" refers to.

Regarding claims 9 and 10, the recitation, in claim 9, "...wherein is comprises..." is unclear. Examiner is uncertain if a word is missing or a wrong word is entered.

Regarding claim 3, the word "means" is preceded by the word(s) "obtained by" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim 6 recites the limitation "the application" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-5 provide for the use of ulvans, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Iqbal et al. "Studies on aqueous extracts of three green algae as an elicitor of plant defense mechanism" Pak. J. Bot.**

Iqbal et al. teaches extracts of algae and the preparation of elicitors from *Ulva lactulus* (Abstract). The preparation method disclosed includes chopping, washing with distilled water and extraction (Pg 194 Para 3). Acid hydrolysis is also taught (Pg 194 Para 6). Elicitor treatment and application to plants is also taught along with the use of liquid feed in an amount of 0.1 to 100g per liter (Pg 194 last Para Pg5 Para 1).

Accordingly, the claims are anticipated by the reference. In any event, the claims would also be obvious over the reference since; one having an ordinary level of skill in the art would have been able to perform routine experimentation to determine a suitable or optimal amount of material to use.

**Claims 1-3, 6 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Briand US 5058033.**

Briand teaches utilization of algae extract for the preparation of pharmaceutical or agricultural compositions. The invention of Briand utilizes extracts of algae (Abstract). Briand discloses the use of brown, green or red algae and more particularly, *Fucus vesiculosus*. However, other varieties of algae which are suitable to be used according to the invention are *Ulva lactuca*, *Enteromorpha* or *Laminaria digita* (Col. 1 line 45-50). The use of algae extract as an agricultural composition is taught. In the method of making grinding, extraction and filtration is taught (Examples 5 and 10). Water contact is also taught which would be considered as washing.

Accordingly, the claims are anticipated by the reference. In any event, the claims would also be obvious over the reference since, anticipation is the epitome of obviousness.

**Claims 4, 5, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Briand US 5058033**

Regarding claim 4, Briand et al. teaches an extraction step. However, does not expressly state the use of acid hydrolysis or enzymatic hydrolysis as the extraction step to obtain the algae extracts.

At the time of invention it would have been obvious to one having an ordinary level of skill in the art to use any type of extraction method as this would not lead to any unexpected results.

Regarding claims 5, 7, 8 and 10, Briand et al. teaches only the amount of algae used. However, the reference does not expressly state the amount of extracts obtained from those algae.

At the time of invention it would have been obvious to one having an ordinary level of skill in the art to perform routine experimentation to determine a suitable or optimal concentration of extracts to be made for plant treatment.

**Claims 1-4, 6 and 9 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over De La Fuente et al. EP 1437334 A1.**

De La Fuente et al. teaches an algal species-based organic complement for vegetal fertilization and productive process for manufacturing the same (Abstract). The source of the organic component is disclosed to be green algae *Ulva rigida*. Washing milling, extraction, mincing and acid treatment are disclosed in the process (Pg3 line 5-30).

Accordingly, the claims are anticipated by the reference. In any event, the claims would also be obvious over the reference since, anticipation is the epitome of obviousness.

**Claims 5, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over De La Fuente et al. EP 1437334 A1.**

Regarding claims 5, 7, 8 and 10, De La Fuente et al. teaches only the amount of algae used (Table 1). However, the reference does not expressly state the amount of extracts obtained from those algae.

At the time of invention it would have been obvious to one having an ordinary level of skill in the art to perform routine experimentation to determine a suitable or optimal concentration of extracts to be made for plant treatment.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory



double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10594692. Although the conflicting claims are not identical, they are not patentably distinct from each other because the functional use of each set of claims is different from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED IQBAL whose telephone number is (571)270-5857. The examiner can normally be reached on Monday to Thursday 7:30am EST to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 5712721358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Langel/  
Primary Examiner, Art Unit 1793

/S. I./  
Examiner, Art Unit 1793